

Date: Thursday, 14/08/2008 11:50:04 AM
 User: Linda Lacelle

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: HELI-ACCESS STEP LH (FOLDING)
Job Number	: 41243 -2	Part Number	: D412630033
Estimate Number	: 12567	Drawing Number	: IIN D412-630
P.O. Number	:	Project Number	: N/A
This Issue	: 14/08/2008 S.O. No. :	Drawing Revision	: L
Prsht Rev.	: NC	Material	:
First Issue	: 1/1 Type : LARGE FAB ASSY	Due Date	: 21/08/2008
Previous Run	: 41003	Qty:	1/2 Um: Each
Written By	:		
Checked & Approved By	: JLD 08-8-18		
Comment	: Est. Rev:A New Issue 06-11-08 JLM		
	: est rev B ecn 1019, added d2807-041 EC verified by:DD		

Additional Product

Job Number:



Seq. #:	* Machine Or Operation:	Description :
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1.0

DC

DOCUMENT CONTROL



for JLD 08/8/26



Comment: DOCUMENT CONTROL

Photocopy bluefile & create labels per PPP D412-630-033 CHG003

SS 08/12/11

2.0

D2012107

Clevis



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Clevis

Pick:

Qty	Part Number	Description
1	D2012-107	Clevis

Batch

40274

SS 08/12/11 (x2)

3.0

D2803041

Bracket Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bracket Assembly

Pick:

Qty	Part Number	Description
1	D2803-041	Bracket Assembly LH

Batch

41672

SS 08/12/11 (x2)

4.0

D2804041

Bracket Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bracket Assembly

Pick:

Qty	Part Number	Description
1	D2804-041	Bracket Assembly LH

Batch

41054

SS 08/12/11 (x2)

Process Sheet

mer: CU-DAR001 Dart Helicopters Services

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Job Number: 41243

Part Number: D412630033

Job Number:



Seq. #: Machine Or Operation: Description :

5.0 D2807041 Door prop



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)

Support Prop

Batch: 35751

SS 08/12/11 (K2)

6.0 D2813 Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)

Washer

Pick:

Qty	Part Number	Description
2	D2813	Washer

Batch 34620

SS 08/12/11 (K2)

7.0 D3562041 Step Assembly, LH



Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)

Step Weldment LH

Pick:

Qty	Part Number	Description
1	D3562-041	Step Weldment LH

Batch B41648

CPB 08/12/12 (K2)

8.0 D33951 Bushing



Comment: Qty.: 4.0000 Each(s)/Unit Total: 8.0000 Each(s)

Bushing

Pick:

Qty	Part Number	Description
4	D3395-1	Bushing

Batch 41035

W 09/01/13

9.0 AN3C21A BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description
2	AN3C21A	Bolt

Batch M10189

SS 08/12/11 (K2)

ay, 14/08/2008 11:50:04 AM
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Process Sheet

mer: CU-DAR001 Dart Helicopters Services

Drawing Name: HELI-ACCESS STEP LH (FOLDING)

Job Number: 41243

Part Number: D412630033

Job Number:



Seq. #:	Machine Or Operation:	Description :
10.0	AN8C16	Bolt
Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)		
Bolt		
Pick:		
Qty	Part Number	Description
2	AN8C16	Bolt
Batch		M105969 88 08/12/11 (X2)
109569		
11.0	AN310C8	Nut
Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)		
Nut		
Pick:		
Qty	Part Number	Description
2	AN310C8	Nut
Batch		M106431 88 08/12/11 (X2)
12.0	MS24665302	Cotter Pin
Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)		
Cotter Pin		
Pick:		
Qty	Part Number	Description
2	MS24665-302	Cotter Pin (or AN380C3-4)
Batch		M106763 88 08/12/11 (X2)
13.0	NAS1515H3	Washer
Comment: Qty.: 6.0000 Each(s)/Unit Total: 12.0000 Each(s)		
Washer		
Pick:		
Qty	Part Number	Description
6	NAS1515H3	Washer
Batch		M107101 88 08/12/11 (X2)
14.0	NAS1515H5L	WASHER
Comment: Qty.: 4.0000 Each(s)/Unit Total: 8.0000 Each(s)		
WASHER		
Pick:		
Qty	Part Number	Description
4	NAS1515H5L	Washer
Batch		M104956 88 08/12/11 (X2)

Process Sheet

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Part Number: D412630033

Job Number:



Seq. #:	Machine Or Operation:	Description :
15.0	NAS1515H8	Washer
Comment: Qty.: 4.0000 Each(s)/Unit Total : 8.0000 Each(s) Washer Pick: Qty Part Number Description Batch 4 NAS1515H8 Washer M109099 SS 05/12/11 (x2)		
16.0	MS210433	Nut
Comment: Qty.: 4.0000 Each(s)/Unit Total : 8.0000 Each(s) Nut Pick: Qty Part Number Description Batch 4 MS21043-3 Nut M109535 SS 05/12/11 (x2)		
17.0	MS24693C280	Screw
Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s) Screw Pick: Qty Part Number Description Batch 2 MS24693-C280 Screw (or MS24694-C565) M101390 SS 08/12/11 (x2)		
18.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
Comment: SMALL & MEDIUM FAB RESOURCE 1 Assemble as per dwg D412-630 p.14 Coat all hardware with LPS3 rust inhibitor A/R LPS3 batch: M109929 COAT exposed HARDWARE WITH LPS PROCYON . A/R LPS PROCYON BATCH: M104251 EF 08/12/12 (2)		
19.0	QC5	INSPECT WORK TO CURRENT STEP
Comment: INSPECT WORK TO CURRENT STEP S 08/12/12 (x2) (CH)		

Process Sheet

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Job Number: 41243

Part Number: D412630033

Job Number:



Seq. #:

Machine Or Operation:

Description:

20.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Pick Packing Kit

21.0

D28061

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)
Bushing

Pick: Packing Kit

Qty Part Number
2 D2806-1

Description
Bushing

Batch

35630

SS 08/12/11 (x2)

22.0

D28063

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)
Bushing

Pick: Packing Kit

Qty Part Number
2 D2806-3

Description
Bushing

Batch

36534

SS 08/12/11 (x2)

23.0

D28105

Strut



Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)
Strut

Pick: Packing Kit

Qty Part Number
1 D2810-5

Description
Strut

Batch

40900

SS 08/12/11 (x2)

24.0

D33961

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)
Spacer

Pick: Packing Kit

Qty Part Number
2 D3396-1

Description
Spacer

Batch

34025 x1 84670 x3

SS 08/12/11 (x2)

25.0

AN4C6A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)
Bolt

Pick: Packing Kit

Qty Part Number

Description

Batch

109147

SS 08/12/11 (x2)

day, 14/08/2008 11:50:04 AM
da Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HELI-ACCESS STEP LH (FOLDING)

Job Number: 41243

Part Number: D412630033

Job Number:



Seq. #:	Machine Or Operation:	Description :
1	AN4C6A	Bolt
26.0	AN4C10A	Bolt
Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)		
Bolt		
Pick: Packing Kit		
Qty	Part Number	Description
1	AN4C10A	Bolt
Batch		
M101189 M105940 M104167 M104167		
27.0	AN4C15A	Bolt
Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)		
Bolt		
Pick: Packing Kit		
Qty	Part Number	Description
2	AN4C15A	Bolt
Batch		
M107082		
28.0	AN4C7A	Eyebolt
Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)		
Eyebolt		
Pick: Packing Kit		
Qty	Part Number	Description
1	AN44-C7A	Eyebolt
Batch		
M109013		
29.0	AN5C15A	Bolt
Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)		
Bolt		
Pick: Packing Kit		
Qty	Part Number	Description
2	AN5C15A	Bolt
Batch		
M105125		
30.0	NAS1515H4	Washer
Comment: Qty.: 7.0000 Each(s)/Unit Total : 14.0000 Each(s)		
Washer		
Pick: Packing Kit		
Qty	Part Number	Description
7	NAS1515H4	Washer
Batch		
M108880		

Process Sheet

Order: CU-DAR001 Dart Helicopters Services

Drawing Name: HELI-ACCESS STEP LH (FOLDING)

Job Number: 41243

Part Number: D412630033

Job Number:



Seq. #:	Machine Or Operation:	Description :
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31.0	NAS1515H5	Washer
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Comment: Qty.: 7.0000 Each(s)/Unit Total : 14.0000 Each(s)

Washer

Pick: Packing Kit

Qty	Part Number	Description	Batch
7	NAS1515H5	Washer	M68334

SS 08/12/11 @

32.0	MS210434	Nut
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Comment: Qty.: 4.0000 Each(s)/Unit Total : 8.0000 Each(s)

Nut

Pick: Packing Kit

Qty	Part Number	Description	Batch
4	MS21043-4	Nut	M109160

SS 08/12/11 @

33.0	MS210435	Nut
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Comment: Qty.: 3.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

Pick: Packing Kit

Qty	Part Number	Description	Batch
3	MS21043-5	Nut	M109535

SS 08/12/11 @

34.0	QC4	INSPECT 100% KITS FOR COMPLETENESS
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Comment: INSPECT 100% KITS FOR COMPLETENESS

Socializ (H1H)

35.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D412-630-033

Location:

PPP Rev: A

9/01/13 (1)

36.0	QC21	FINAL INSPECTION/W/O RELEASE
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Comment: FINAL INSPECTION/W/O RELEASE

09/01/13

Job Completion



mr 09-01-13

D412-630-033/-034 Heli-Access-Step™ Installation

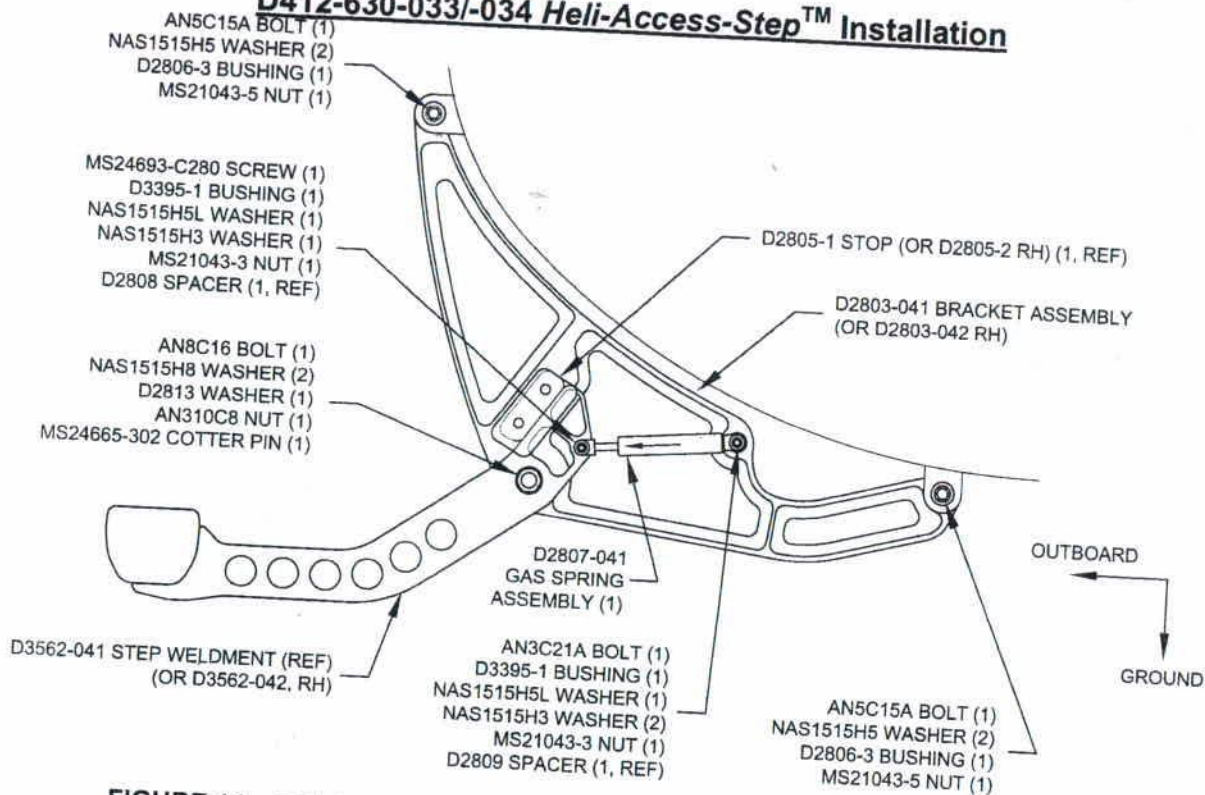


FIGURE 14 – STA 84.29 for D412-630-033/-034 Heli-Access-Step™ Installation (View rotated 90° CW)

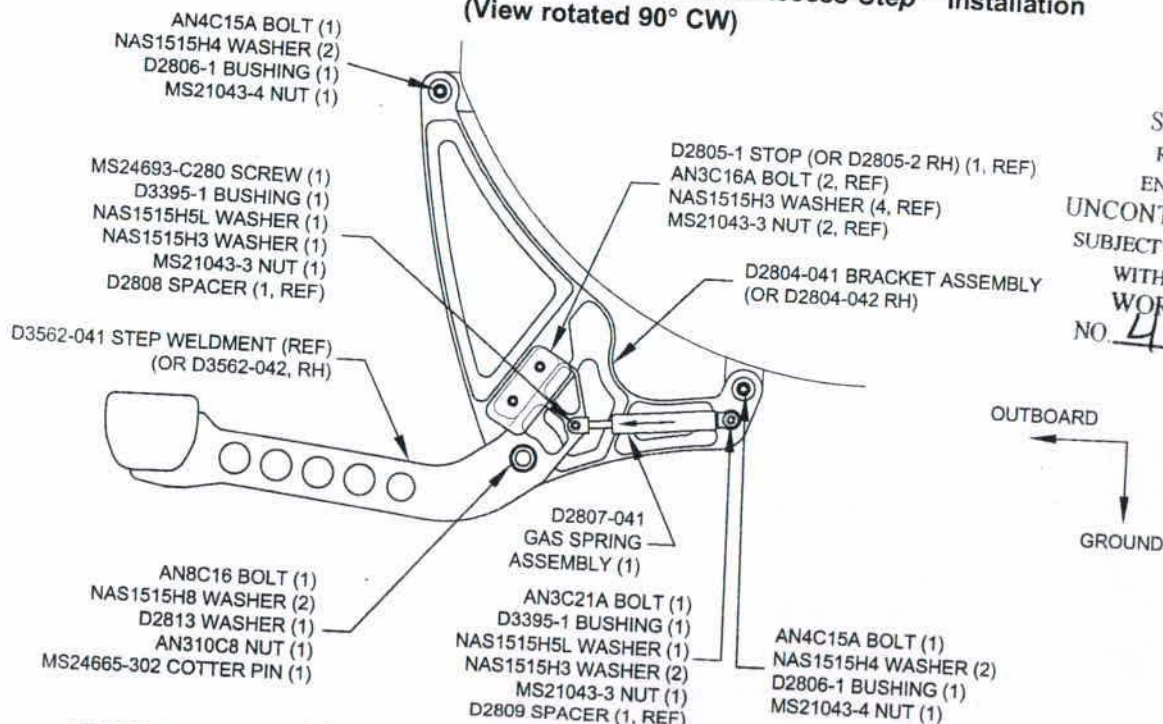


FIGURE 15 – STA 155.06 for D412-630-033/-034 Heli-Access-Step™ Installation (View rotated 90° CW)

SHOP COPY
RETURN TO
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 41243

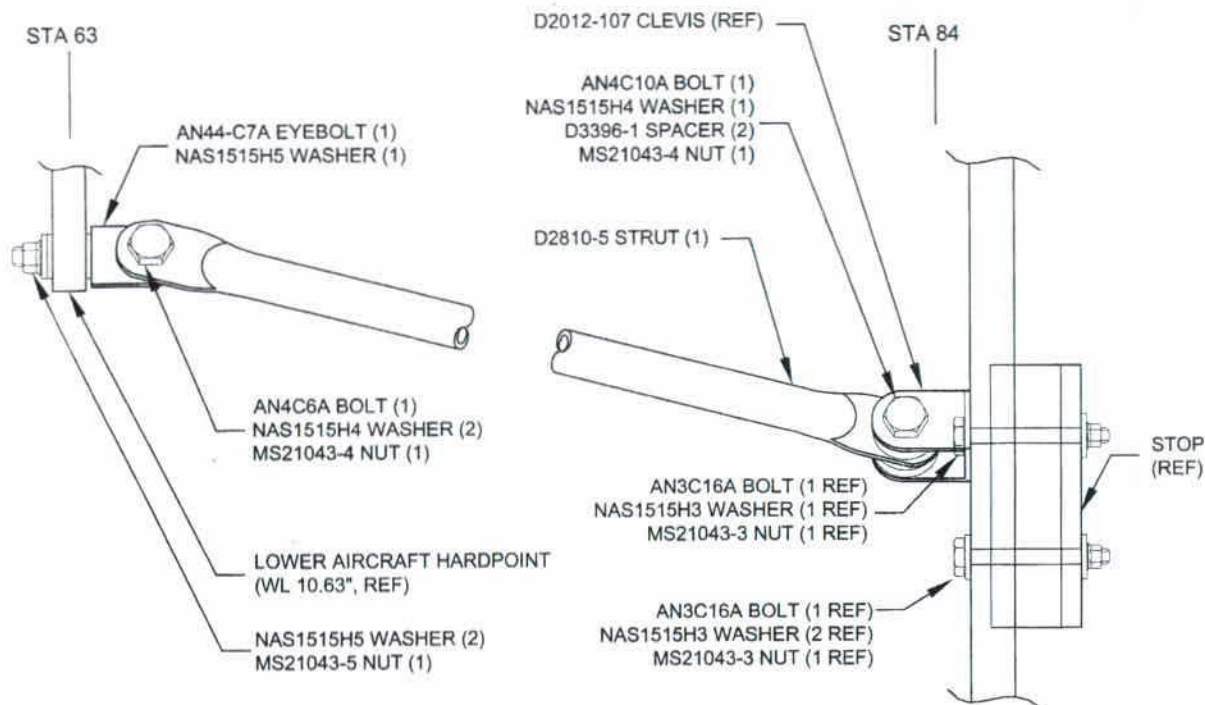
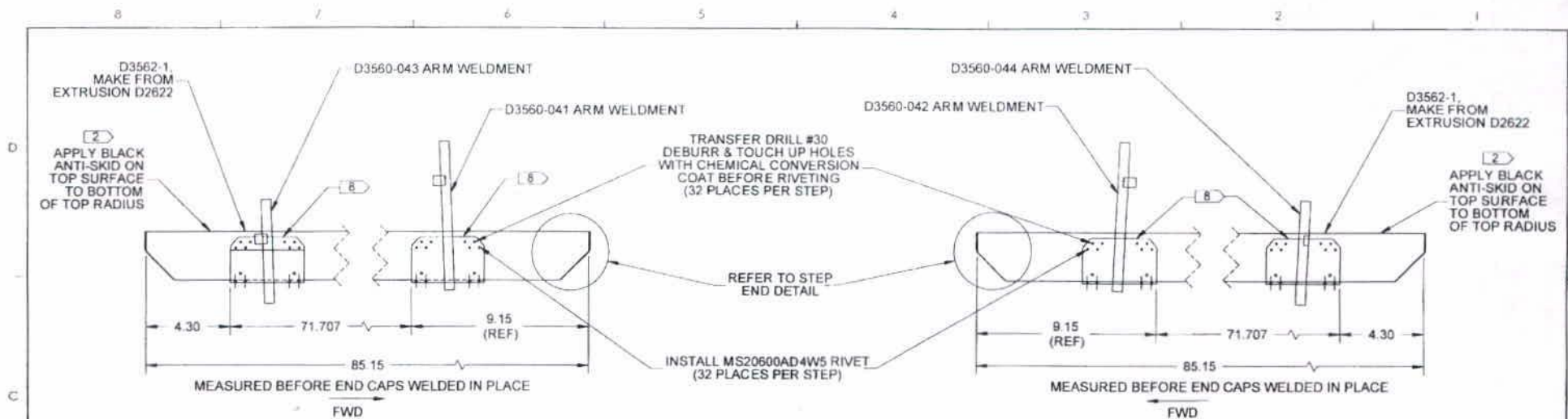


FIGURE 16 – Strut Detail for D412-630-033/-034 Heli-Access-Step™ Installation
(NOT TO SCALE)

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WORK ORDER
NO. 41243



D3562-041 LH STEP ASSEMBLY

D3562-042 RH STEP ASSEMBLY

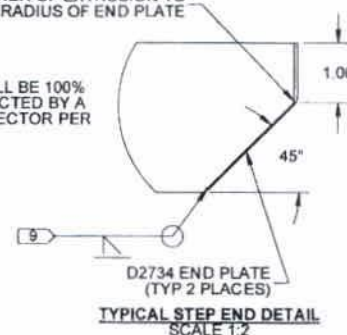
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH:
 - i) CHEMICAL CONVERSION COAT STEP EXTRUSION PER DART QSI 005 4.1 BEFORE ASSEMBLY
 - ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDETEX (4.3.5.6) OR BLACK SANDETEX (4.3.5.7) OR GREEN SANDETEX (4.3.5.8) PER DART QSI 005 4.3
 - iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 8.79 lbs
- 8) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.
- 9) WELDING: PER DART QSI 004

QTY -041	QTY -042	P/N	DESCRIPTION
X	X	D3562-041	LH STEP ASSEMBLY
		D3562-042	RH STEP ASSEMBLY
1	1	D3560-041	ARM WELDMENT
1	1	D3560-042	ARM WELDMENT
1	1	D3560-043	ARM WELDMENT
1	1	D3560-044	ARM WELDMENT
32	32	MS20600AD4W5	RIVET
2	2	D2734	END PLATE

ROUND CORNER OF EXTRUSION TO MATCH BEND RADIUS OF END PLATE

NOTE: ALL WELDS SHALL BE 100% VISUALLY INSPECTED BY A QUALIFIED INSPECTOR PER DART QSI 004



TYPICAL STEP END DETAIL
SCALE 1:2

E	ADD QTY (2) TO D2734 END PLATE ON D3562-042	PH	08.01.11
D	REMOVE D2808 SPACER NOTE, REDRAWN IN SOLIDWORKS	DC	07.11.16
C	NOW MAGNOBOND, ADD D2808, REMOVE 4 RIVETS	CP	07.06.19
B	ARMS NOW RIVETED TO STEP	CP	07.01.15
A	NEW ISSUE	CP	06.09.26
REV.	DESCRIPTION	BY	DATE

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. I
MFG. APPR.		D3562	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		STEP ASSEMBLY 1:	
DATE	08.01.11	COPYRIGHT © 2006 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON AN EXPRESS OR IMPLIED BASIS OF NO WARRANTY. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.</small>	